AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently amended) A ceramic cooktop comprising:

a cooking plate made of a material selected from the group formed by a glass ceramic and a glass;

a ceramic bonding layer provided on a surface of said cooking plate;

a thermally sprayed electrically conducting intermediate layer located on said ceramic bonding layer and being connected to ground;

a thermally sprayed insulating layer located on said intermediate layer; and

a thermally sprayed electric heat conductor layer located on said insulating layer;

wherein said intermediate layer is configured as an oxide layer that is rendered electrically conductive by oxygen loss during thermal spraying.

2. (original) The ceramic cooktop of claim 1, wherein said intermediate layer is made of a material selected from the group formed by TiO_2, a mixture of Al_2O_3 having a portion of at least 50 wt.-% of TiO_2, ZrO_2, a mixture of Al_2O_3 with ZrO_2 having a portion of at least 50 wt.-% of ZrO_2, and a mixture of Al_2O_3 with TiO_2 and ZrO_2 having a portion of at least 50 wt.-% of TiO_2 and ZrO_2.

3. (original) The ceramic cooktop of claim 1, wherein said insulating layer consists of a material selected from the group formed by cordierite and mullite.

4. (original) A ceramic cooktop comprising:

a cooking plate made of a material selected from the group formed by a glass ceramic and a glass;

a thermally sprayed electric heat conductor layer;

a thermally sprayed insulating layer arranged between said cooking plate and said heat conductor layer; and

an electrically conducting intermediate layer arranged between said cooking plate and said insulating layer;

wherein said intermediate layer is configured as a thermally sprayed layer consisting of cermet material.

5. (original) The ceramic cooktop of claim 4, wherein said cermet material has a metal matrix comprising at least one component selected from the group formed by nickel, cobalt and chromium.

6. (original) The ceramic cooktop of claim 4, wherein said cermet material has a metal matrix being configured as an alloy comprising the major components nickel, cobalt and chromium.

7. (original) The ceramic cooktop of claim 4, wherein said cermet material further comprises carbide particles dispersed within said metal matrix.

8. (original) The ceramic cooktop of claim 7, wherein said carbide particles are selected from the group formed by tungsten carbide and chromium carbide.

9. (original) The ceramic cooktop of claim 4, wherein said insulating layer consists of a material selected from the group formed by cordierite and mullite.

10. (original) The ceramic cooktop of claim 9, wherein said insulating layer is a thermally sprayed layer.

11. (original) A ceramic cooktop comprising:

a cooking plate made of a material selected from the group formed by a glass ceramic and a glass;

an electric heat conductor layer;

an insulating layer arranged between said cooking plate and said heat conductor layer; and

an electrically conducting intermediate layer located between said cooking plate and said insulating layer;

wherein said intermediate layer is configured as a thermally sprayed layer consisting of an electrically conductive material selected from the group formed by a ceramic and a cermet.

12. (original) The ceramic cooktop of claim 11, wherein said intermediate layer is configured as an oxide layer that is rendered electrically conductive by oxygen loss during thermal spraying.

13. (original) The ceramic cooktop of claim 12, wherein said intermediate layer consists of a cermet material having a metal matrix comprising at least one component selected from the group formed by nickel, cobalt and chromium.

14. (original) The ceramic cooktop of claim 13, wherein said cermet material has a metal matrix being configured as an alloy comprising the major components nickel, cobalt and chromium.

15. (original) The ceramic cooktop of claim 14, wherein said intermediate layer consists of a cermet material having a metal matrix comprising carbide particles dispersed within said metal matrix.

16. (original) The ceramic cooktop of claim 15, wherein said carbide particles are selected from the group formed by tungsten carbide and chromium carbide.

17. (original) The ceramic cooktop of claim 14, wherein said insulating layer consists of a material selected from the group formed by cordierite and mullite.

18. (original) The ceramic cooktop of claim 17, wherein said insulating layer is a thermally sprayed layer.